13. A method for the preparation of dissolved catalyst component comprising:

a) providing a halogenated precursor component characterized by the formula:

$$X\,[CH_2]_n\,CH_3 \qquad \text{(I)}$$

wherein X is an halogen and $_n$ is an interger within the range of 1-12;

b) reacting the halogenated precursor with an ionic liquid precursor to prepare an ionic liquid;

c) mixing in a solvent one equivalent of the ionic liquid prepared in paragraph b) with a metallic complex of the formula:

$$L_2MY_2 \qquad \text{(II)}$$

wherein L is a coordinating ligand for the metallic site providing coordination achieved by phosphorus, nitrogen or oxygen, M is nickel palladium or iron, and Y is a halogen or a C_1-C_{12} alkyl group;

d) evaporating the solvent; and

e) recovering a hybrid single site catalyst component/ionic liquid system.

14. The method of claim 13 wherein the ionic liquid precursor is an N –hydrocarbyl imidazole or pyridine.

15. The method of claim 14 wherein said ionic liquid precursor is an N-R imidazole in which R is an aryl group or an alkyl group having from 1 – 12 carbon atoms.

16. The method of claim 14 wherein the ionic liquid is 1-methy-3-pentylimidazolium bromide or N-pentyl pyridinium bromide.

17. The method of claim 13 further comprising prior to subparagraph c) reacting said ionic liquid with an ionic compound characterized by the formula C^+A^- wherein C^+ is a cation selected from the group consisting of K^+, Na^+, NH_4^+, and A^- is an anion selected from the group consisting of PF_6^-, SbF_6^-, BF_4^-, $(CF_3\text{-}SO_2)N^-$, ClO_4^-, $CF_3\text{-}SO_3)_2N^-$, ClO_4^-, $CF_3\ SO_3^-$, NO_3^- and $CF_3CO_2^-$.

18. The method of claim 13 wherein said solvent is selected from a group consisting of tetrahydrofuron, methylene dichloride, and acetonnitrile.

19. A hybrid organometallic complex/ionic liquid system produced by the method of claim 13.

20. A hybrid catalyst system comprising the hybrid organometallic complex/ionic liquid system of claim 19 and an activating agent.

21. The hybrid catalyst system of claim 20 wherein the activating agent is methylaluminoxane and Y is halogen.

22. The hybrid catalyst system of claim 21 wherein the methylaluminoxane is present in an amount to provide an Al/M ratio within the range of 100 to 1,000.

23. A method for the preparation of an alpha olefin polymer comprising:

a) providing a catalyst system comprising a single site catalyst component produced by the process of claim 13 and an activating agent for said catalyst component;

b) adding an apolar solvent to said catalyst system to heterogenise said catalyst system;

c) introducing said heterogenised catalyst system in an apolar solvent and an alpha olefin monomer into a polymerization reactor;

d) operating said reactor under polymerization conditions; and

e) recovering an alpha olefin polymer product from said reactor.

24. The method of claim 23 wherein said alpha olefin monomer comprises ethylene or propylene.

25. The method of claim 24 wherein said apolar solvent is n-heptane.

26. The method of claim 25 wherein said activating agent is methylalumoxane and wherein said polymer product recovered from said polymerization reactor is in the form of chips or blocks.

27. The process of claim 24 wherein said polymer product recovered from said reactor contains polymer particles having a diameter of at least 0.5 mm.

28. The method of claim 24 wherein said methyalumoxane is employed in an amount to provide a ratio of aluminum to the metal M within the range of 100 – 1,000.

29. The method of claim 24 wherein the ionic liquid is an puridenum compound and the polymer product recovered from said polymerization reactor comprises polymer particles having a diameter of at least 2 mm.

30. The method of claim 24 wherein the ionic liquid is an imidazolium compound and the polymer product recovered from said polymerization reactor comprises polymer particles having a diameter of about 0.5 mm.